# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. II.

NOVEMBER, 1896.

No. II.

#### ITALIAN RENAISSANCE CORNICES.

HE cornice is the upper mouldings, of a wall, designed in exterior work to protect the wall itself from the drip of rain and to form an agreeable finish, and also to receive the roof where one is used, and in interiors to serve as a gradual transition from the vertical surfaces of the wall to the horizontal ceiling.

In the earlier and simpler styles the cornice existed merely as a cavetto moulding, but this developed gradually into an ornamental feature made up of a number of members. Those archæologists and students of architecture who trace the Greek and Roman orders to a wooden prototype use the classic cornice with its supporting frieze and architrave as one of their most convincing arguments in support of this derivation.

In Egypt, where rain was infrequent and a wide projection unnecessary, the cornices of the older buildings are of the simplest form; in fact, they do not deserve the name, and need only be mentioned as evidence of one of the earlier forms of this treatment. It is constantly found in Egypt and is common in Assyrian and Phænecian remains. In its simple form this cornice was not sufficient to protect the walls of a building where rain was abundant, and in Greece it was naturally superseded by one of greater projection. The development of mutules and guttæ,

modillions and dentils, was a natural one, which followed the gradual increase in the desire for complexity and elaboration, down to the time of the fall of the Roman empire. The severe and heavy Doric became more delicate, and was followed by the Ionic, and in turn by the Corinthian, all of which were borrowed and modified by the Romans, all the while growing more and more cut up and enriched.

Towards the end of the fifteenth century the Renaissance movement began to be felt, but it was not until the middle of the sixteenth century that it was well established. The renewed use of the classic orders presented difficulties which were solved in many different ways. The palaces of Florence, Siena and Rome, for instance, being made up of several stories, one above another, it was desirable to keep these divisions distinct, giving in the façade a complete order to each one, or at least above the first story, which could be used as a basement or stylobate. In this division of stories the ancient theatres, such as the Coliseum and the Theatre of Marcellus, contained suggestions. So it came about that each cornice, in the shape of a band or string course encircling the building, was expected to follow the proportions of the order used on that story. The cornice which crowned the wall, if submitted to the same conditions, would not be in proportion to the height of the building.

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Cornice of the Riccardi Palace, Florence,

The colossal order, which was immediately adopted in spite of true logical principles, and of which Michael Angelo has given a remarkable example in the palace of the Capitol, satisfies these latter conditions, because the height of the order, being the same as that of the building, the cornice takes its proper proportion and relation to the wall. This is an abuse of the classic colonnade which did not exist until the beginning of the sixteenth century. Bramante, studying, without doubt, the Coliseum, sought to give greater importance to the upper cornice in the use of consoles or modillions. The beautiful main cornice of the Cancelleria in Rome is treated in this manner. Another departure was soon taken, however. The orders, placed one above another, were still used in the interior courts, but disappeared from the facade, which, divided by string courses, and without other projections than a row of quoins at the angle, received a rich projecting cornice, the proportions of which correspond to the height of the façade. As an example, take the beautiful Farnese Palace, the cornice of which may be by Michael Angelo, or possibly Vignola, and which is one of the most magnificent in Rome. Also the elegant Massiani Palace, the masterpiece of Peruzzi, and the Ruspoli and Spade palaces, etc.

We cannot leave the subject, no matter how rapidly we are passing over it, without speaking of a Florentine palace, the cornice of which is treated after the manner of those just referred to, and which is especially remarkable for its beauty of design and its size. This is the Strozzi Palace, colossal in size (104 feet in height from the ground to the top of the cornice), and is crowned by an entablature composed of a plain unornamented frieze, bearing upon the astragal which terminates the wall of the façade which is built of rusticated masonry from top to bottom, and supporting the cornice which follows the form of the Corinthian order, with modillions, and having a projection of nearly seven feet, and a trifle more than this in height. The effect is wonderfully rich and powerful.

We can see that the architects of the beginning of the sixteenth century (the

Strozzi Palace was begun at the close of the fifteenth century) were presented with a new difficulty, when to the height of the building was added the extra projection necessary to make such a cornice effective. The great cornice of the temple of Jupiter Stator had a projection only a little over five feet. Thus, the architect, Simone Pollaiuolo, called Cronaca, who built the cornice of the Strozzi Palace in imitation of an antique fragment which was found in his time in the Roman Forum, sought to provide against the sliding off or falling of his cornice by building it hollow, and very carefully balancing the stones of which the courses were made up.

Terra-cotta and brick also furnish materials which have been used very distinctively and effectively in cornices.

LXXXI.

CORNICE OF THE RICCARDI PALACE, FLORENCE.

LXXXII.

CORNICE OF THE RICCARDI PALACE, FLORENCE.

The Riccardi Palace was built in 1430 by Michelozzo Michelozzi, for Cosimo di Medici. The principal front is about two hundred and thirty feet long and about eighty feet high. The cornice is a very vigorous and satisfactory one.

A general description of the palace will be found in the number of the Brochure Series for October, 1896.

LXXXIII.

CORNICE OF THE PICCOLOMINI PALACE,
FLORENCE,

This cornice is almost the exact counterpart, on a smaller scale, of the famous Strozzi Palace cornice; its members and proportions are practically identical.

LXXXIV.

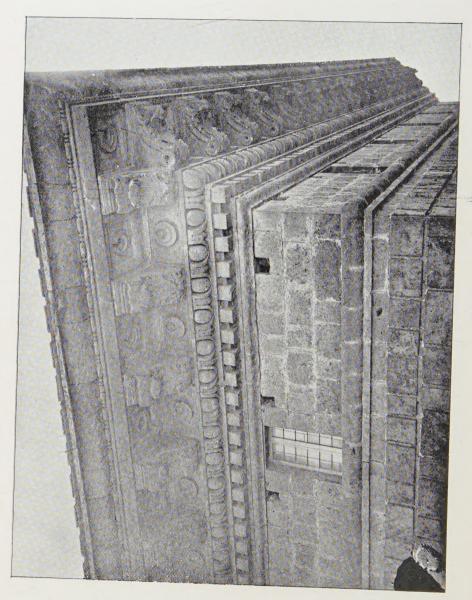
CORNICE OF THE PALAZZO POLLINI, SIENA.

As the plate indicates, this cornice, as well as the work from the Certosa at Pavia, is of terra-cotta.

LXXXV.

CORNICE OF THE LOGGIA DEI LANZI, FLORENCE.

In 1375, Andrea di Cione built the Loggia dei Lanzi opposite the Palazzo Vecchio. Its three arches are doubtless so familiar that a description is unnecessary. It is Gothic in spirit and detail, but the architect, instead of using a pointed arch, employed a round one.



LXXXIII.

LXXXVI.

CORNICE OF THE CLOISTER, CERTOSA AT PAVIA.

LXXXVII.

CORNICE OF THE CLOISTER, CERTOSA AT PAVIA.

LXXXVIII

CORNICE OF THE CLOISTER, CERTOSA AT PAVIA.

The Certosa at Pavia was a Carthusian monastery, founded in 1396, by Gian Galeazzo Visconti. Its architectural interest is confined to its celebrated church, one of the richest and most elaborately decorated buildings in Europe. A vestibule, with some muchdecayed frescoes by Luini, leads to an inner court, at the farther end of which is the front of the church, which has a nave and side aisles, transept and choir, with a polygonal dome at the crossing. The exterior, except the front, is of brick, and is a curious mixture of styles. in which the Lombard-Romanesque may perhaps be said to predominate; several of the most notable features of that style, as the round apse and the arcaded galleries under the cornice, being employed in almost unequalled profusion.

The complexity of the design, however, makes the general effect more Gothic than Lombard. The projections of the chapels about the choir make three reentrant angles in each shoulder of the crossing; each salient angle of the building (twelve in all) is marked by a small square turret, carried up into an open shrine or lantern; the buttresses and gables are crowned by pinnacles. The octagonal lantern at the junction of nave and transept is a striking and effective feature, composed of two retreating stories of open colonnades with entablatures, a third story of arches surmounted by a balustrade, and a Renaissance belfry with eight arches and pilasters at the angles, crowned with a high dome.

The façade, nearly a century later than the body of the church, is wholly distinct from it in design, being an early Renaissance building, begun in 1473 by Borgognone, a Milanese architect, and finished after his death. It is divided by projecting pilasters into five compartments; the three in the centre being carried up to a level gallery of open arches with a heavy cornice far above the nave roof, the two side com-

partments terminating at half the height of those in the centre, with open belfries at the extreme angles. The whole front has become of almost unparalleled richness by successive elaboration. single doorway in the middle is a round arch, flanked by coupled Corinthian columns on either side with broken entablatures. In the side divisions are grouped windows with architrave, frieze and cornice. Above the first story a gallery of open arches runs the whole width of the front. Above is a range of windows; that in the centre being circular, those in the sides being roundarched and coupled. Every portion of the front is covered with sculptured ornament, the pilasters carrying ranges of statues in niches, and the wall being divided into panels decorated with carving and inlay of rich marbles, porphyry, jasper, bronze, medallions of the Roman emperors, and heads of angels.

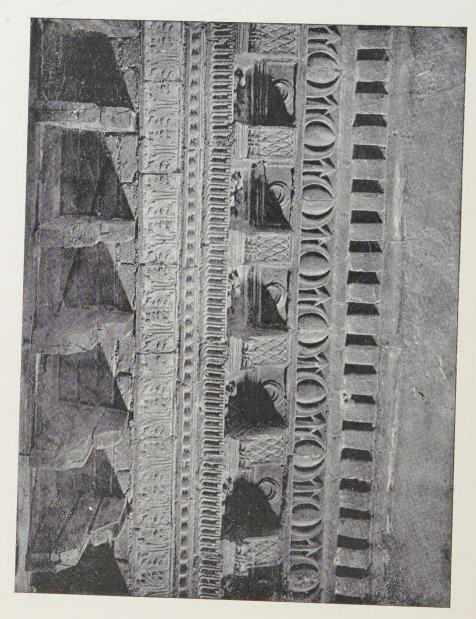
On the south side of the church are two cloisters, with beautiful arcades of terra-cotta arches decorated profusely with exquisitely modelled sculpture in high and low relief, and supported on slender marble columns. The larger of these cloisters measures 420 by 330 feet and is surrounded by the twenty-four small houses of the monks.

## Special Notice.

No one who does not already take the Architectural Review should neglect taking advantage of our special offer of Volume I., complete, and a subscription, for \$7.50. If it will be any more convenient the subscription may be made by installments, particulars of which will be sent on application. Volume I. contains some of the best detail drawings ever published, including Magonigle's famous drawings of the Madison Square Garden and Century Club.

As a special inducement to new subscribers to the Brochure Series for 1897, we will send the numbers for 1896 and a special number of the Architectural Review, containing an assortment of extra plates, for 50 cents additional.

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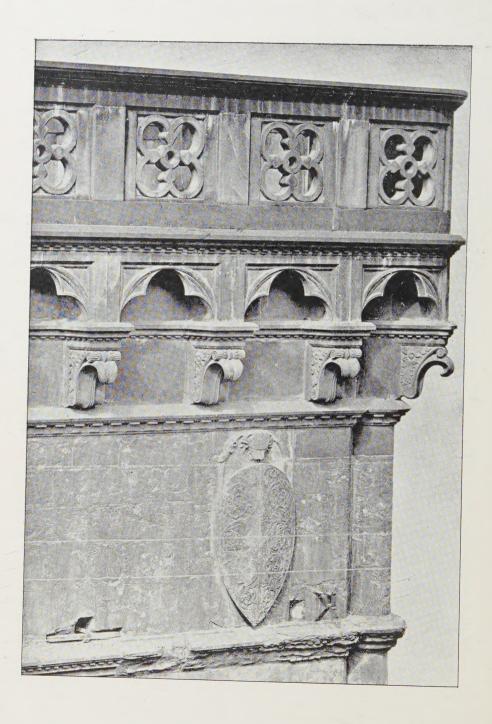
At just what point advertising begins and leaves off - that is to say, what should be called by the term and what should not - is a difficult matter to determine. There is a tacitly accepted custom, which has in some cases been reduced to a rule, that members of what are known as the "professions" shall not seek employment by advertising; yet certain professional men freely use methods for bringing themselves before the public which are frankly accepted as advertising methods, and for which advertisers regularly expend much These same men would be shocked at the suggestion that their conduct was in the least "unprofessional." The distinctions upon this point in the minds of many architects must be drawn with a finer appreciation of propriety than is vouchsafed to ordinary mortals.

An example in point is furnished, by the publication of the first number of what is ostensibly an architectural periodical, but which is really an advertising "scheme," by which three reputable architects are "written up," as advertising men say - we trust, without being called upon to pay for it. This "scheme" is a familiar one, and is not held in any too high repute. Publications of this class are ephemeral, and are usually given an inflated value all out of proportion to their true worth. Nobody imagines that they have any special value except to their promoters, who reap rich harvests. Business men are drawn into them because they do not see how to refuse, or because their vanity is flattered by the unlicensed praise doled out at so much a line.

There appears to be little difference between these "schemes" and the new publication we refer to. The editor, author and publisher, one and the same individual, very justly discredits any claim to criticise the architecture which he illustrates. His articles are no more and no less than advertising "puffs," with the usual accompaniments. How men with the professional standing of the two firms of architects whose work receives this fulsome praise can knowingly lend themselves to such a barefaced advertising "scheme" it is hard to see. We prefer to conclude that they have not seen the matter in its true light.

In an article read before the Royal Institute of British Architects upon "The Probable Influence of the Technical Education Movement upon the Architect and his Work," Mr. Frank Caws made the following reference to the employment which a young architect can profitably make of his time:—

"An architectural student who is wishful to make the most of his time, and yet who must keep himself in health by a certain amount of physical exercise, might usefully substitute for a while, for his dumbbells and Indian clubs, the joiner's saw and plane, and the mason's mallet and chisel, and the blacksmith's hammer, at the technical school, so killing two birds, as it were, with one stone. The architectural student should not, however, expect to become a skilled amateur mechanic, nor should he give to such manual labor time which ought to be consecrated solely to the study of art and science. The youngest students of architecture ought not to give any large part of their leisure to the study of constructional science; for the first subject of a young student's care should be to cultivate art, pure and simple, except such practical studies of construction which he is sure to encounter in the course of his day's work at the office. Such art as he specially needs the architectural student can learn under excellent masters in the Central School of Art at Kensington, or in any of its London or provincial branches. He ought not, for the first two years of his pupilage,



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to use a T-square, straight-edge, or compass at the art school, or anywhere out of office hours. Let him learn, above and before all things, to draw, and then to shade, to paint, to carve, to model in clay; and to do all these things as an artist purely (and not as an architect), and to do them well. No proficiency in the knowledge of constructive science, no dexterousness in the use of level and tape and theodolite out of doors, and of line and rule in the office, will ever atone for a want of competency to do the work of an artist. An architect who cannot draw properly cannot see properly, or think and feel properly. This may seem an absurd statement, but it is most deeply true.

"After a youth has been two years absorbing his whole leisure in the passionate pursuit of art, he will, by means of his ordinary day's work in the architect's office, have begun to have an inkling of the necessity of his acquiring structural science. It is better that this should not be forced too suddenly upon him, even by his attendance at the technical schools. Let him grow slowly to realize it, just as the grown man, when the flush of youth is past, has it gradually brought home to him that, 'life is not all cakes and ale.' By forcing too soon upon the architectural student the demands of his profession, there is danger of blunting and spoiling his keenest and most sensitive art feelings, which should be encouraged to grow unhindered and unpruned while the brief springtime lasts. No matter if his earlier designs display the greatest ignorance of constructive science, so long as they show the passion and fervor of the artist. If the student be earnest, constructive science will enter in due course into his life and thoughts; and he will not be content so long as it remains unmastered."

# Architectural Students and the Handicrafts.

Portion of a paper by T. G. Jackson.

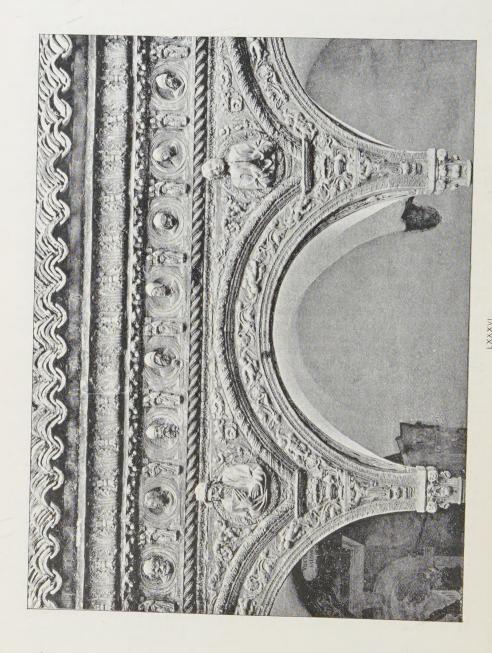
It used to be the fashion for any one writing or speaking on architecture to

cite Vitruvius as the authority for what he said. The writings of Vitruvius are no longer regarded by everybody as the gospel of architecture, and, indeed, are now perhaps rarely read by architectural students. And yet on the present occasion I cannot do better than take as a text the opening passages of his treatise, which seem to apply very aptly to the subject for discussion tonight.

Vitruvius distinguishes at the outset between practice and theory in architecture, and goes on to point out that architects who are mere handicraftsmen without literary training are unable to give any reason for what they do, while those who trust only to theory and book learning without practical training seem to grasp at a shadow, and not reality.

An architect, he says, must be properly trained in both fields. He must be both ingenious and teachable, for neither will wit without training nor training without wit make the perfect artist. He must be a skilful draughtsman, a learned geometrician, not ignorant of optics, instructed in arithmetic, a good historian and a diligent student of philosophy. He must understand music, he must know something of medicine, he must be familiar with the decisions of the lawyers, he must understand astrology and astronomy. This is a formidable programme, and if one may without profanity speak disrespectfully of a writer who has hitherto been considered almost sacred, one would be tempted to say he was writing nonsense. The first part of his list is, no doubt, necessary enough; and as to the latter part, when we come to his explanations, we find that they do not make so much demand on the student as at first sight they seem to do. The usefulness of his historical lore is to enable the architect to explain the meaning of some of his ornaments, and to tell the inquirer that the figures of caryatids, which were used as columns, were derived from the matrons of Caryas, a Peloponnesian city, who were carried into slavery because their country had sided with the Persians against the Greeks.

On the other hand, we have the dictum of the Greek architect, Pythius, who says that the architect must not only have this general theoretical knowledge,



but must be actually skilled in the practice of all the arts which he has to deal with, and not only that, but superior in each one of them to the specialist who follows only that single art.

Which of the two is to be our guide? Shall we be satisfied to be proficient in the theory of our art, learning it from books and lectures, and merely acquainting ourselves with practical work in a general way, enough to enable us to understand our specifications, and order the work properly, and detect flagrant instances of inferior workmanship and bad material; or are we with Pythius to put our hands to the work ourselves, and not only design but help to execute it; to train ourselves to be master craftsmen as well as superintendents and directors of other men's labor?

For many generations past the former of the two methods has been the order of the day. Most of us who have reached or passed middle age have been brought up under it, and if we have to any extent departed from it, it has been of our own initiation that we have done so.

That this plan was not that in vogue during the best periods of modern European art is well known. It was not in that way that the architects, or building artists of the Renaissance, in its earlier and more independent days, or those of the Middle Ages, worked. They would have been at a loss how to go on if you had parted them from their building and their workmen, and shut them up with a drawing-board and a T-square, and asked them to make their designs and convey their instructions by means solely of drawings. Their method was that of Pythius rather than that of Vitruvius, whose gospel, fortunately, had not in their day obtained currency, or been placed on the canon of inspired author-

I need not tell you that of late years there has been a revulsion against what I will call the Roman method of practising architecture in favor of the Greek. Many of us have been preaching against the strictly professional view of architecture, and urging that a man cannot be expected to produce good designs who seldom or never comes into contact with

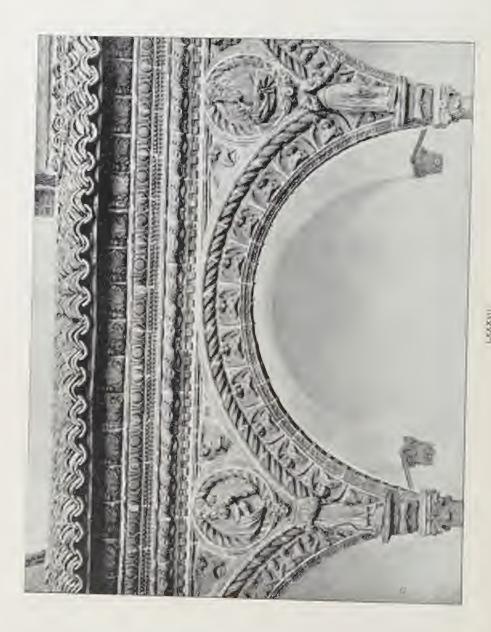
the materials out of which his designs have to be constructed. We have argued that it is from the handling of material that suggestions in design can most readily be gathered; that reading about processes in building, or any of the arts which go to make up a building, will never teach a man how to make the most of his opportunity, how to use his material to the best advantage, how to economize labor so as to avoid wasting it to no purpose, and how to design in accordance with the natural qualities of stone, iron or wood with which he has to deal. We have tried to impress on the student that an hour spent in the workshop or on the scaffolding will often teach him more than a week spent in a library. We have gone still further, and tried to persuade students not only to go and see how things are done, but actually to put their own hands to the work, and to become handicraftsmen in one or more of the many arts with which, as architects, it is incumbent on them to be familiar, and of which it is necessary the technicalities should be understood by any one who undertakes to design for them.

(To be continued.)

# Notes.

When a building material is used on all of the Astor properties in New York, it has about the strongest possible endorsement. Indeed, the Astor trade in some lines is sufficient to keep an ordinary-sized plant running. For years Giant Metal Sash Chain has gone into the Astor properties, and there is no likelihood of any change being made in favor of the cheaper chains. The fact that direct competitors acknowledge that no chain can be better than the Giant Metal, but all claim to make "as good" a chain, ought to be all the argument needed for its specification on good work.

The "Old Pierce House," located at Dorchester, Mass., is an admirably



preserved specimen of the earliest New England architecture, and a monument to the solid and substantial building of our forefathers. Built in 1635, it has never been owned or occupied by any but a lineal descendant of its builder, the present owner being of the eighth generation from the original Robert Pierce. A short time ago, in making repairs, it became necessary to open the walls of this ancient structure, when they were found to be stuffed, between the studding, with eel-grass, placed there, no doubt, for more complete pro-

The above facts are cited because the most common, and what would be, if true, a most vital objection raised by prospective users of insulating and deafening "quilt" made from this material is that the eel-grass filling will, in course of time, decay or become brittle and powdered, thus rendering the quilt worthless for the purposes to which it is applied. This is, perhaps, a natural hypothesis, but scientific reasons for the contrary view can be given. In this connection it may be well to observe that the presence in the eel-



THE OLD PIERCE HOUSE, DORCHESTER, MASS.

tection from the rigorous climate of the New World. Notwithstanding the almost innumerable alternations from dry to damp and damp to dry to which it must have been subjected during the more than two and a half centuries that it has remained in these walls, this eelgrass was found to be in a perfect state of preservation. The cause of this preservation is found in the chemical constitution of the eel-grass, which contains silicon in place of the carbon of common grasses, which also makes it non-inflammable.

grass of a large percentage of iodine, common to all sea plants, renders it free from the attacks of moths and vermin, to destruction by which wool felts and all other materials of animal origin are peculiarly subject. The long, flat blades of eel-grass, crossing each other at every angle as they do in the quilt manufactured by Samuel Cabot, 70 Kilby Street, Boston, form the innumerable minute dead air spaces which give to the material most of its great insulating power; and their elasticity contributes the resilience which furnishes the rest.

# LXXXVI





 $\label{eq:LXXXIX.} LXXXIX.$  Chair from the Collection of Dr. W. H. Crim, Baltimore, Md.

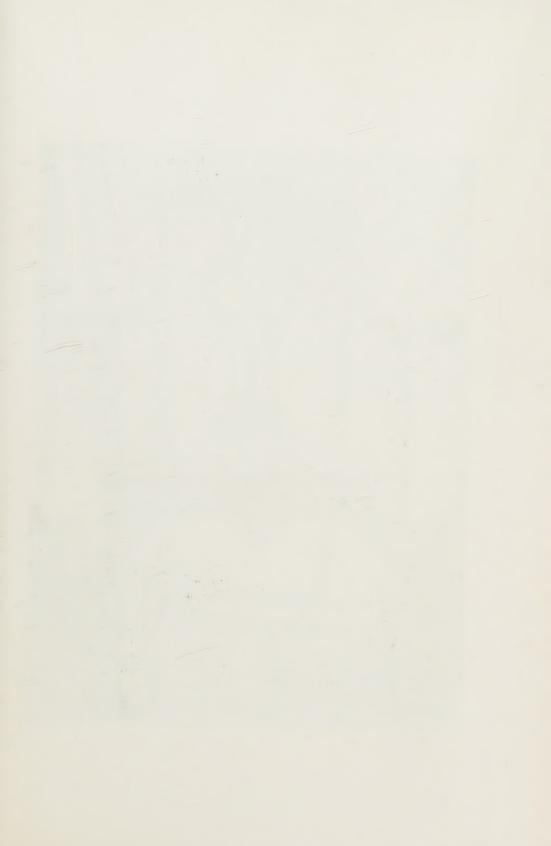








XCI.
Chair from the Collection of Dr. W. H. Crim, Baltimore, Md.





XCII.





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